## 60 Hz 3 Phase AC to Bulk DC Converter (Inherent Harmonic Suppression)

- MIL-STD-1399 compliant
- Passive power factor correction
- Low parts count for high MTBF up to 500,000 hours (naval sheltered environment)
- Rugged construction, MIL-STD-810 and MIL-S-901 compliant
- MIL-STD-167 compliant
- Rack mountable



TYPICAL FORCED-AIR COOLED MODEL

Abbott Technologies offers three standard types of harmonically corrected bulk converters:

- Unregulated with power factor correction and power levels from 1000 Watts to 25,000 Watts;
- Regulated with power levels from 1000 Watts to 5000 Watts;
- Battery Charger Configuration.

INPUT PRIMARY: 115V DELTA Suffix A

**INPUT FREQUENCY:** 60HZ. 3 Phase.

240V DELTA Suffix B 440V DELTA Suffix C ISOLATION: Input to Output: 2500V Input to Case: 2500V Output to Case: 500V

**VOLTAGE OUTPUT:** 24, 28, 280, 300 Other voltages are available upon

request.

RELIABILITY:

MTBF 500,000 hours in naval sheltered environment (for non-regulated models)

**COOLING METHODS:** 

**Fan-Cooled** - Suffix A (standard case); **Water-Cooled** - Suffix H (consult factory for

case dimensions)

#### **OPERATING TEMPERATURE:**

Power factor corrected.

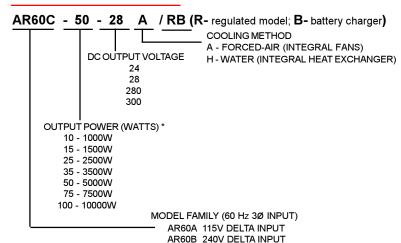
Unregulated Units: -40°C to + 85°C

Regulated Units or Chargers: -40°C to + 70°C (no derating)

#### **MOUNTING PROVISIONS:**

Soft-deck mounting is available with regular fans. Hard-deck, ultra-rugged, mounting is available with heavy duty fans.

#### **MODEL NUMBER SYSTEM**



TYPICALWATER-COOLED MODEL

Last updated July 24, 2002

#### **POWER RATING**

Abbott 🎖

Sun Valley, CA 91352 Tel. 818-504-0644

Fax. 818-768-0395

Harmonic current limits in MIL-STD-1399 are based upon a percentage of fundamental current at full load. Abbott models are designed for compliant operation at full rated resistive load. Caution should be exercised when selecting power rating of model to avoid overspecifying, as a converter operating too far below its rating may draw harmonic currents in excess of MIL-STD-1399 limits, compared with delivered power.

Call us toll-free

AR60C 440V DELTA INPUT

1-800-367-8200

#### MAINOFFICE:

8203 Vineland Avenue, Sun Valley, CA 91352 (818) 504-0644 FAX: (818)768-0395 Visit our website at **www.abbott-tech.com** and on-line quote form at sales@abbott-tech.com.



<sup>\*</sup> For units with output power greater than 10,000 Watts, consult factory.

# 60 Hz 3 Phase AC to Bulk DC Converter (Inherent Harmonic Suppression)

#### REGULATION:

#### **Unregulated models:**

- Load Regulation: 10% Typical
- Line Regulation: N/A Regulated models:
- Load Regulation: 2% TypicalLine Regulation: 2% Typical

#### **ENVIRONMENT:**

Encapsulated to meet MIL-STD-810 for vibration, shock, acceleration, sand, dust, humidity, saltspray, fungus, sunshine, rain, explosion and altitude.

#### **BATTERY CHARGER OPTION:**

- Units that are used for charging batteries can be supplied with smart battery charger feature, factory configurable to meet your specific battery charging requirements.
- Temperature compensation available.
- Units are available with up to 4 state charge profile (lead acid).

#### **BUILT-IN TEST:**

Regulated models only.

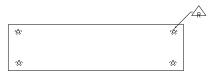
- Input phase loss.
- Input under/over voltage.
- Remote Enable/Disable.
- Output under/over voltage.
- Output overload alarm.
- Over temperature condition.
- Fan locked rotor alarm.

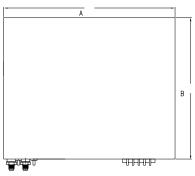
#### CONSTRUCTION:

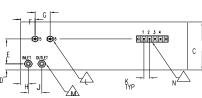
To MIL-PRF-27, Grade 4, Class S, steel case.

#### **MECHANICAL DIMENSIONS**

#### **TYPE H-WATER-COOLED**





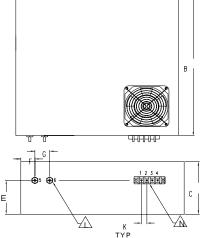


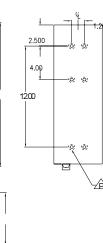




### TYPE A - FAN-COOLED







Output Power (W)	Size	Α	В	С	E	F		Rack Mount Space (REF)
1000	10	12.00	13.00	3.46	1.75	1.25	1.50	2U
1500	15	12.00	13.00	3.75	1.75	1.25	1.50	3U
2500	25	14.00	13.00	4.00	1.75	1.50	2.00	3U
3500	35	17.00	15.00	4.75	2.25	1.50	2.00	3U
5000	50	17.00	15.00	5.50	2.75	2.00	2.00	4U

Output											Rack Mount
Power (W)	Size	Α	В	С	D	E	F	G	Н	J	
2500	٥٢	44.00	40.00	4.00	4.50	4 75	4.50	2.00	4.05	2.00	21.1
2500			12.00								
3500	35	17.00	15.00	4.75	1.50	2.25	1.50	2.00	1.25	2.00	3U
5000	50	17.00	15.00	5.50	1.50	2.75	2.00	2.00	1.25	2.00	4U
7500	consult factory										
2500 3500 5000 7500 10000	C	nsu	It fa	ctor	y						

K- UP TO 30A INPUT: .562: ABOVE 30A: .750

L- UP TO 150A: 5/16-18 STUD; ABOVE 150A: 3/18-16 STUD

M- 37° FLAIR x 3/8 316 STAINLESS FITTINGS

N- UP TO 30A INPUT: 8-32 SCREW; ABOVE 30A: 1/4-20 STUD

P-SEE MOUNTING PROVISIONS PAGE FOR SLIDE AND BRACKET INFORMATION

R- SEE MOUNTING PROVISIONS PAGE FOR RACK PANEL INFORMATION

Specifications are subject to change without notice

Call us toll-free 1-800-367-8200

#### MAINOFFICE:

Abbott 📆

8203 Vineland Avenue Sun Valley, CA 91352 Tel. 818-504-0644

Fax. 818-768-0395

8203 Vineland Avenue, Sun Valley, CA 91352 (818) 504-0644 FAX: (818)768-0395 Visit our website at **www.abbott-tech.com** and on-line quote form at sales@abbott-tech.com.